

PATENT

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The Minister for Economic Affairs,

Noting the Act of 28 March 1984 on patents, especially article 22;
Noting the Royal Decree of 2 December 1986, relating to the application, granting and maintenance of patents, especially article 28;
Noting the minutes drawn up by the Department of Industrial Property on 18 April 1997 at 14.35 hours

RESOLUTION:

ARTICLE 1 - a patent for the period of 6 years, subject to payment of the annual charges for:
PACKAGING FOR CLEANING AGENT, ESPECIALLY FOR CLEANING HANDS

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ARTICLE 2- this patent is granted without prior investigation of whether it can be patented, without guarantee of its value or the correctness of the description of the invention and at the applicant(s)' own risk.

Brussels, 4 May 1999
WITH SPECIAL AUTHORITY:

L WUYTS
ADVISOR

"Packaging for a cleaning agent, especially for cleaning hands"

This invention relates to a packaging for a cleaning agent, especially for cleaning hands.

The familiar hand soap is generally produced in a tablet form (rectangular or round). Soap gel packaged in pots, with or without a pump, is also widely used. Soap and gel packaged in such a form are intended to be used at fixed locations. Such fixed locations include bathrooms, toilets, garages, workshops and similar sanitary facilities. The term soap gel also refers to liquid soaps and foam soaps.

A soap or gel intended for a single use does not appear to be known, although the use of a limited quantity of cleaning agents at locations where the aforementioned sanitary facilities do not exist is currently a necessity.

The aim of the invention is to provide a solution to the problems outlined above, thereby enabling dirty hands to be washed anywhere and at any time.

In order to facilitate this as per the invention, the packaging for a cleaning agent is realised in the form of portions restricted to single use in packaging made from a water-soluble film. The expression "portions" comprises all geometrical moulds.

As per a first possible embodiment, the aforementioned packaging is ball-shaped.

As per another notable embodiment, the aforementioned packaging comprises a water-soluble film in the form of a glove.

As per all embodiments of the invention, the aforementioned washing agent is in the form of a gel, the composition of which does not attack the aforementioned water-soluble film.

The description below of the packaging for a cleaning agent for hands as per the invention will show other details and advantages of the invention. This description is only given as an example and does not restrict the invention.

Two possible embodiments are discussed below:

A. Ball shape

The small spheres in which the washing agent in the form of a gel is "packaged", have a diameter of 1 - 4 cm, preferably 3 cm. The spheres consist of a thin water-soluble film. However, the film is not attacked by the gel so that the ball-shaped packaging serves its purpose until the gel has to be used. On use, a sphere is squeezed open in the dry palm of

the hand and the contents released are distributed over the hands and rubbed in well. After washing, the hands are rinsed off with water or, in the absence thereof, dried off with a cloth or tissue. Instead of gel, the ball-shaped packaging may contain a hand cream. The use of the biological, soluble packaging film can be applied to any substance deriving from the cosmetic, medical, biological and chemical sectors, with the purpose of domestic and industrial use thereof.

The gel packaged for single use offers a number of advantages such as:

- convenience and confidence because the hands can always be cleaned at any time and anywhere;
- the contents of the ball-shaped packaging represent an "ideal" portion;
- the balls or spheres take up little space;
- there is no residue or waste;
- the packaging is environmentally friendly;
- water is not required..... ?
- the balls or spheres can be stored in tubes and distributed from there.

B. Glove shape

Working from the principle underlying the embodiments just described, a special embodiment has been conceived, namely biodegradable gloves. The glove used has been manufactured from a film with the same physical properties as described under A above.

The interior of the glove is covered with a cleaning agent in the form of a gel, or with a hand cream. The glove form with the cleaning gel is primarily, but not necessary exclusively, used for cleaning very dirty hands. The use is preferably as follows: the gloves are put on 10 to 15 minutes prior to the end of a specific work activity (in the case of rough or heavy work, conventional working gloves are put on over the top). After a certain time, the gel has completely penetrated into the pores, the folds of the skin and the cuticles so that the dirt is removed from the skin.

The two gloves can then be removed and the hands can be rinsed or rubbed dry with a cloth or tissue.

As undergloves in heavy work, these gloves also protect the skin against the penetration of dirt, dust and odours. These gloves can also be used to avoid the transmission of dust or dirt to objects.

As the glove is made from a water-soluble film, it dissolves completely when water is used and therefore offers the same advantages as the gel packaged in the shape of a ball.

In order to prevent drying out and undesired soiling of the hand soap or cream applied internally, it appears necessary to provide a water and air-tight sealing seam at the open part of the glove. The glove is ready for use once the tear-off sealing seam has been removed, whereby the wrist part comes open and can be pulled over the hand. This sealing seam should be understood in the broadest sense with regard to working methods such as heat sealing, any adhesion or cohesion agent using glues, threads, adhesive strips or any other sealing system that has the purpose of protecting the product applied in the glove in a water and air-tight fashion against drying out and penetration of dirt.

The open parts of two gloves are attached to one another. When their use is required, the gloves should be detached from one another, which action tears open the sealing seam. This releases the wrist parts and the gloves can be pulled on over the hands.

The hygienic aspect of this sealing seam, namely prevention of internal soiling, can also be applied as such on disposable gloves composed of latex or any other raw material from which these gloves are made.

If the interior of the glove is provided with a fresh-smelling hand cream, it is particularly useful for protecting and caring for dry hands, as well as when the skin on the hand is rough and split.

After a short period of use, for example in the event of engine trouble, replacing a punctured tyre or putting on a bicycle chain, the cream on the interior of the glove has penetrated the skin and the gloves can be removed.

The invention is not restricted to the embodiments described here by way of example and amendments may be made if these fall within the framework of the added claims.

CLAIMS

1. Packaging for a cleaning agent, especially for cleaning hands, characterised in that it is realised in the form of portions restricted for single use in packagings of a water-soluble film.
2. Packaging for a cleaning agent as per claim 1, characterised in that the aforementioned packaging is ball-shaped.
3. Packaging for a cleaning agent as per claim 2, characterised in that the aforementioned ball-shaped packaging has a diameter between 1 and 4 cm.
4. Packaging as per claim 1, characterised in that the aforementioned packaging consists of a water-soluble film in the form of a glove.
5. Packaging as per claim 4, characterised in that the aforementioned glove is provided with a tear-off seam on the wrist part.
6. Packaging as per one of claims 1 to 5, characterised in that the aforementioned cleaning agent is in the form of a gel, the composition of which does not attack the aforementioned water-soluble film.